



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/752,135	01/06/2004	David E. Francischelli	P-8922.06	3918
27581	7590	07/18/2007	EXAMINER PEFFLEY, MICHAEL F	
MEDTRONIC, INC. 710 MEDTRONIC PARKWAY NE MINNEAPOLIS, MN 55432-9924			ART UNIT 3739	PAPER NUMBER
		MAIL DATE 07/18/2007	DELIVERY MODE PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)
	10/752,135	FRANCISCELLI ET AL.
	Examiner	Art Unit
	Michael Peffley	3739

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 20 November 2006.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-12 and 16-29 is/are rejected.
- 7) Claim(s) 13-15 is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 06 January 2004 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on November 20, 2006 has been entered.

Priority

Applicant's claim for priority is to prior application US Serial No. 10/408,871, filed April 8, 2003. However, this claim is apparently not correct as the recited US Serial Number has no overlapping subject matter with the instant application. It is apparent applicant intended to file priority to US Serial No. 10/409,071. Applicant should amend the specification, and include the US Patent Number that has issue from the application.

Oath/Declaration

It does not state that the person making the oath or declaration acknowledges the duty to disclose to the Office all information known to the person to be material to patentability as defined in 37 CFR 1.56.

Applicant's oath/declaration of January 6, 2004 acknowledges the duty to disclose information known to be material to the examination of the application in accordance with 37 CFR 1.56(a). The term "examination" should read "patentability" and the rule referenced should be 37 CFR 1.56 as indicated in the paragraph above. Correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 21, 22, 25 and 29 are rejected under 35 U.S.C. 102(b) as being anticipated by Stern et al (5,443,463).

Stern et al discloses a system comprising an ablation apparatus (10) having first and second jaws (20,30). Energy is delivered to a first side of tissue via electrodes (21), and an array of temperature sensors (31) are provided on the other jaw to sense temperature on the opposite side of tissue (Figure 1A). An output device (i.e. computer 114) is used to display parameters and control the output of RF energy in response to the sensed temperature. In as much as applicant's specification teaches that temperature provides an indication of lesion transmurality, the examiner maintains that the Stern et al system is inherently adapted to provide an indication of transmurality of the lesion (i.e. coagulation zone) since it is monitoring tissue temperature. As seen in Figures 2B and 6, the sensors are provided in the form of a grid.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-4, 6-9, 12, 16 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stern et al (5,443,463) in view of the teaching of Nagai et al (5,172,949).

Stern et al has been addressed previously. While Stern et al teaches of providing energy to one side of tissue and monitoring temperature on an opposite side of tissue, there is no specific teaching of using suction to hold the tissue on the working surface as recited in claim 1.

Nagai et al, as addressed in the previous Office action, discloses that it is known to provide a combination suction and temperature sensing element to hold a working surface in contact with the device for monitoring temperature.

To have provided the Stern et al temperature monitoring jaw with a suction source associated with the temperature sensors for holding tissue during treatment and tissue temperature monitoring would have been an obvious consideration for one of ordinary skill in the art in view of the teaching of Nagai et al.

Claims 5, 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stern et al ('463) and Nagai et al ('949) as applied to claims 1 and 4 above, and further in view of Chinn (5,647,868).

The combination of the Stern et al device with the Nagai et al teaching has been addressed. While Stern et al disclose a computer system for controlling and displaying data, there is no specific teaching that a representation of the device is used to indicate measured parameters such as temperature (i.e. lesion transmurality).

Chinn discloses an analogous RF treatment system that uses temperature sensing to control RF output. In particular, Chinn teaches that it is known to provide a display that includes a visual representation of the device to show sensed and performance output parameters during a surgical procedure. This allows the user to visually acquire data of the system during the procedure.

To have provided the Stern et al device, as modified by the teaching of Nagai et al, with a virtual display to provide a visual representation of the system and working parameters such as temperature would have been an obvious modification for one of ordinary skill in the art since Chinn teach it is known to use such a display to assist in analogous surgical procedures.

Claims 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stern et al ('463) and Nagai et al ('949) as applied to claim 1 above, and further in view of Hoffman (4,682,605).

Stern et al fail to disclose the use of liquid crystals and/or temperature sensing chemicals to monitor temperature. The examiner maintains that the use of any well-known temperature sensing mechanism in the Stern et al device would be an obvious substitution.

To that end, Hoffman et al disclose that it is old and well-known to use temperature sensing devices such as liquid crystals and temperature sensing chemicals to provide detailed temperature mapping of tissue.

To have provided the Stern et al device, as modified by the teaching of Nagai et al, with liquid crystals or temperature sensing chemicals as the temperature sensing grid on the second jaw of the device would have been an obvious modification for one of ordinary skill in the art since Hoffman fairly teaches that it is known to use such means for tissue temperature monitoring.

Claims 23, 24 and 26-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stern et al ('463) in view of the teaching of Chinn ('868).

Again, Stern et al disclose a computer system for controlling and displaying data, but there is no specific teaching that a representation of the device is used to indicate measured parameters such as temperature (i.e. lesion transmurality).

Chinn discloses an analogous RF treatment system that uses temperature sensing to control RF output. In particular, Chinn teaches that it is known to provide a display that includes a visual representation of the device to show sensed and performance output parameters during a surgical procedure. This allows the user to visually acquire data of the system during the procedure.

To have provided the Stern et al device with a virtual display to provide a visual representation of the system and working parameters such as temperature would have been an obvious modification for one of ordinary skill in the art since Chinn teach it is known to use such a display to assist in analogous surgical procedures.

Allowable Subject Matter

Claims 13-15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

Applicant's arguments with respect to claims 1-29 have been considered but are moot in view of the new ground(s) of rejection.

Of note, applicant indicates that Stern et al disclose temperature sensors and electrodes on the same device jaw as shown in Figure 6. This is but one embodiment, however. Figures 1B-2C clearly show the temperature sensors located on one jaw, with the electrodes located on the other jaw on the opposite side of the tissue.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Wellman et al (6,652,518) disclose another suction assisted RF device for assessing lesion transmurality.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Peffley whose telephone number is (571) 272-4770. The examiner can normally be reached on Mon-Fri from 7am-4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Linda Dvorak can be reached on (571) 272-4764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3739

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Michael Peffley/
Primary Examiner
Art Unit 3739

/mp/
July 13, 2007